IN THE SPECIFICATION

Page 1, in the heading, please cancel "tesa AG...Description".

Page 1, before the first line of text, please insert:

--This is a 371 of PCT/EP2003/013167 filed 24 November 2003 (international filing date).--

Page 1, line 11, please insert:

--Background of the invention—

Paragraph beginning on page 2, line 23 (amended):

Patents ~~US 4,619,9979~~ US 4,619,979 and US 4,843,134 describe a preparation process for the solvent-free polymerization of acrylates. Here, in a specific polymerization reactor, highly branched polymers were prepared. Drawbacks are the high gel fraction formed during the polymerization, which although allowing a bimodal molecular weight distribution makes it impossible to coat such a material, and the low conversion of the polymerization, resulting in the need to remove acrylate monomers from the system again, an operation which is relatively costly and inconvenient. Since acrylate PSAs are generally composed of two or more comonomers, and these comonomers possess different boiling temperatures and vapor pressures, this is a very costly and inconvenient process.

Paragraph beginning on page 5, line 12 (amended):

Additionally it may be of advantage that for the purpose of increasing conversion an initiator is added that possesses a crosslinking efficiency of more than 5. Examples of such initiators include Perkadox ~~16"'m~~ 16™ from Akzo Nobel.

Paragraph beginning on Page 6, line 18 (amended):

Particularly preferred examples of the vinyl compounds containing functional groups that are to be used for the purposes of the invention are hydroxyethyl acrylate, hydroxypropyl acrylate, hydroxyethyl methacrylate, hydroxypropyl methacrylate, allyl alcohol, maleic anhydride, itaconic anhydride, itaconic acid, acrylamide, benzyl acrylate, benzyl methacrylate, phenyl acrylate, phenyl methacrylate, t-butylphenyl acrylate, ~~t-butylapheny~~ **t-butylphenyl** methacrylate, phenoxyethyl acrylate, phenoxyethyl methacrylate, 2-butoxyethyl methacrylate, 2-butoxyethyl acrylate, dimethylaminoethyl methacrylate, dimethylaminoethyl acrylate, diethylaminoethyl methacrylate, diethylaminoethyl acrylate, cyanoethyl methacrylate, cyanoethyl acrylate, 6-hydroxyhexyl methacrylate, N-tert-butylacrylamide, N-methylolmethacrylamide, ~~N-(buthoxymethyl)methacrylamide~~ **N-(butoxymethyl)methacrylamide**, N-methylolacrylamide, N-(ethoxymethyl)acrylamide, N-isopropylacrylamide, vinylacetic acid, tetrahydrofurfuryl acrylate, β-acryloyloxypropionic acid, trichloroacrylic acid, fumaric acid, crotonic acid, aconitic acid, and dimethylacrylic acid, this enumeration not being exhaustive.

Paragraph beginning on page 7, line 6 (amended):

For the preparation of PSAs the polymers are further blended, optionally, with resins. Resins which can be used are, for example, terpene resins, terpene-phenolic resins, ~~C.- and C.-hydrocarbon resins~~ **C_5- and C_9-hydrocarbon resins**, pinene resins, indene resins, and rosins, alone and also in combination with one another. In principle, however, it is possible to use all of the resins that are soluble in the corresponding polyacrylate; reference may be made in particular to all aliphatic, aromatic, and alkylaromatic hydrocarbon resins, hydrocarbon resins based on single monomers, hydrogenated hydrocarbon resins, functional hydrocarbon resins, and natural resins.

Paragraph beginning on page 7, line 20 (amended):

In one advantageous development, UV photoinitiators are added to the copolymers. Useful photoinitiators are benzoin ethers, such as benzoin methyl ether and benzoin isopropyl ether, substituted acetophenones, such as 2,2-diethoxyacetophenone

(available as Irgacure 651 from Ciba Geigy), ~~2,2-dimethoxy-2-phenyl-1phenylethanone~~ 2,2-dimethoxy-2-phenyl-1-phenylethanone, dimethoxyhydroxyacetophenone, substituted alpha-ketols, such as ~~2methoxy-2-hydroxypropiophenone~~ 2-methoxy-2-hydroxypropiophenone, aromatic sulfonyl chlorides, such as 2-naphthylsulfonyl chloride, and photoactive oximes, such as ~~1-phenyl-1,2-propanedione 2-(0ethoxycarbonyl)oxime~~ 1-phenyl-1,2-propanedione 2-(O-ethoxycarbonyl)oxime, for example.

Paragraph beginning at page 9, line 25 (amended):

The average molecular weight M and the polydispersity PD were determined in the eluent THF used with 0.1% by volume trifluoroacetic acid. Measurement took place at ~~25'C~~ 25° C. The precolumn used was ~~PSS-SDV, 5 p, 103 A~~ PSS-SDV, 5 u, 10^3 A, ID 8.0 mm × 50 mm. Separation was carried out using the columns ~~PSS-SDV, 5 p, 103~~ PSS-SDV, 5 u, 10^3 and also ~~105~~ 10^5 and ~~106~~ 10^6 each with ID 8.0 mm × 300 mm. The sample concentration was 4 g/l, the flow rate 1.0 ml per minute. Measurement was made against PMMA standards.

Paragraph beginning at page 10, line 4 (amended):

The measurements were carried out using the dynamic stress rheometer instrument from rheometrics. For sample preparation the liquid polymers were applied to a siliconized release paper carrier and dried in a drying oven at 120°C for 10 minutes. The application rate was ~~100 g/ml~~ 100 g/m^2 . Strips were then cut and were laminated one on top another until the assembly has a thickness of about 1 mm. From these laminates, circular specimens with a diameter of 25 mm were cut out and the rheological measurements were carried out using these laminates. At 130°C the frequency was varied from 0.1 to 100 rad/s. For comparison, the flow viscosities measured in each case at 1 rad/s are reported. Measurement took place with a parallel plate arrangement.

Paragraph beginning on page 11, line 3 (amended):

A 2 L glass reactor conventional for free-radical polymerizations was charged with 20 g of acrylic acid, 380 g of 2-ethylhexyl acrylate, 133 g of special-boiling-point spirit 69/95 and 133 g of acetone. After nitrogen gas had been passed through the reaction solution with stirring for 45 minutes, the reactor was heated to ~~58'C~~ 58°C and 0.2 g of Vazo 67™ (DuPont) was added. Subsequently the external heating bath was heated to 75°C and the reaction was carried out constantly at this external temperature. After a reaction time of 1 h, 20 g of isopropanol were added. After 2.5 h the batch was diluted with 100 g of acetone. After a reaction time of 4 h a further 0.2 g of Vazo 67™ was added. After a polymerization of 7 h the batch was diluted with 100 g of special-boiling-point spirit 60/95, and after 22 h with 100 g of acetone. After a reaction of 24 h the polymerization was terminated and the reaction vessel was cooled to room temperature. The polymer was analyzed by test methods D and E. Thereafter the polymer was freed from the solvent in a drying oven at 80°C and then applied from the melt through a slot die at 50 g/m^2 to a Saran-primed PET film, cured with electron beams, with an acceleration voltage of 230 kV, and then analyzed for adhesive performance using test methods A, B, and C.

Paragraph beginning on page 12, line 5 (amended):

A 2 L glass reactor conventional for free-radical polymerizations was charged with 20 g of acrylic acid, 380 g of 2-ethylhexyl acrylate, 133 g of special-boiling-point spirit 69/95 and 133 g of acetone. After nitrogen gas had been passed through the reaction solution with stirring for 45 minutes, the reactor was heated to 58°C and 0.2 g of Vazo 67™ (DuPont) was added. Subsequently the external heating bath was heated to ~~75'C~~ 75°C and the reaction was carried out constantly at this external temperature. After a reaction time of 1 h, 100 g of isopropanol were added. After a reaction time of 4 h a further 0.2 g of Vazo 67™ was added. After a polymerization of 22 h, the batch was diluted with 100 g of acetone. After a reaction of 24 h the polymerization was terminated and the reaction vessel was cooled to room temperature. The polymer was analyzed by test methods D and E. Thereafter the polymer was freed from the solvent in a drying oven at 80°C and then applied from the melt through a slot die at 50 g/m^2 to a Saran-primed

PET film, cured with electron beams, with an acceleration voltage of 230 kV, and then analyzed for adhesive performance using test methods A, B, and C.

Page 15, Table 2 (amended):

Table 2				
Example	EB dose [kGy]	Gel index [%] (Test B)	~~HP1ON,~~ **HP 10 N** RT [min] (Test A)	BSS [N/cm] (Test C)
1	40	40	1355	4.0
2	40	37	1280	4.6
3	70	38	1370	4.8
4	100	35	1195	5.0
5	50	42	1645	4.9
6	90	39	255	4.4

Page 16, Table 3 (amended):

Table 3	
Example	η [Pa s] at 1 rad/s and ~~130°C~~ **130°C** (Test F)
1	15 525
2	10 245
3	8475
4	6690
5	11 425
6	12 480

Page 3 line 6, please insert:

--Summary of the invention--

Page 3, line 26, please insert:

--Detailed description--

Page 17, in the heading, please cancel "Claims", and substitute

--We claim:--